



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS,
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/803,266 | 03/09/2001 | Arthur A. Alfaro | 285-148 | 7075 |

7590

11/06/2003

Peter Dilworth
Dilworth & Barrese
333 Earle Ovington Blvd.
Uniondale, NY 11553

EXAMINER

PRIDDY, MICHAEL B

ART UNIT PAPER NUMBER

3732

DATE MAILED: 11/06/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,266

Applicant(s)

ALFARO ET AL.

Examiner

Michael B Priddy

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 12,13,15-17 and 24-37 is/are allowed.
- 6) ☐ Claim(s) 1,2,5,18 and 22 is/are rejected.
- 7) ☐ Claim(s) 3,4,6-11,14, 19-21 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claims 1, 12, 18 and 34-37 recite “the ring being of substantially closed structure.” While the specification lacks this terminology, Figures 1 and 2 appear to provide support for such a structural feature in the “C-shaped” embodiment. However, the Examiner would argue that Figures 3 and 4 show an “intact ring” embodiment which, due to the inclusion of a throughbore 43, is not “substantially closed.”

Claim Objections

Claims 9-11 are objected to because of the following informalities: Claim 9 should depend from claim 1 instead of claim 2 since the specification does not appear provide support for an embodiment wherein the first component is “C-shaped” *and* “an intact ring”. Appropriate correction is required.

Claim 14 is objected to because of the following informalities: in line 2 of claim 14, “at least one of the upper and lower vertebral surface” should be –at least one of the upper and lower vertebral engaging surfaces--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

Claims 1, 2, 5, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferree (US 6,432,107) in view of Anderson et al. (US 6,458,158). Ferree teaches an enhanced area spinal fusion device comprising a first, substantially closed C-shaped ring component, consisting of elements 440 and 446, which has upper and lower vertebral engaging surfaces and a thickness between these upper and lower surfaces; and a second component 420 engagable within the first component 440 & 446 and having a height greater than the thickness of the first component 440 & 446. Fig. 4D illustrates the intended implantation of the device of Ferree into the vertebra of a patient. From this figure it is clear that, upon implantation, the ring 440 & 446 would be positioned within an excised disk space between adjacent vertebrae; and the locking implant 420 would be engaged within the ring 440 & 446 (via screws 444) and with the adjacent vertebrae. The method set forth in claim 18 is therefore considered inherent. Hence Ferree teaches all of the limitations of the present invention except that the first and second components are comprised of bone.

Anderson et al. teach a composite bone graft one embodiment of which (as depicted in Figs. 14A-14C) is a cervical wedge for use in cervical fusions comprising first and second cortical bone portions 82 held together by two cortical bone pins 7. Anderson discloses in lines 28-32 of column 1, that "the composite bone graft promotes the growth of patient bone at an implantation site by promoting osteoinductivity and cellularization". It would have been obvious to one of ordinary skill in the art at the time

Art Unit: 3732

of the present invention to form the fusion device of Ferree of composite bone so as to "promote the growth of patient bone at an implantation site".

Allowable Subject Matter

Claims 3, 4, 6-8, 19-21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 9-11 and 14 are objected to as containing minor informalities but are otherwise allowable.

Claims 12, 13, 15 -17 and 24-37 are allowed.

Response to Arguments

Applicant's arguments filed 10/01/2003 have been fully considered but they are not persuasive. Applicant has argued that Ferree does not teach a device including a first component engagable within a second component. The Examiner clarifies the interpretation of Ferree as follows-- when the device depicted in Fig. 4D is implanted, elements 440 are engaged to element 446 forming a unit (a first component), and element 420 can be considered within this unit consisting of elements 440 and 446.

Conclusion

Art Unit: 3732

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (703) 308-8620. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (703) 308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Michael B. Priddy

Michael B. Priddy
October 30, 2003